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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,909	09/05/2006	Markus Haiml	2008_0399	7448

7590 10/02/2008  
WENDEROTH, LIND & PONACK, L.L.P.  
Suite 800  
2033 K Street, N.W.  
Washington, DC 20006

EXAMINER
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EVANS, FANNIE L

ART UNIT	PAPER NUMBER
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2877

MAIL DATE	DELIVERY MODE
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10/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/565,909

**Applicant(s)**

HAIML ET AL.

**Examiner**

F. L. Evans

**Art Unit**

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.  
2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-90 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
7) ☒ Claim(s) 1-90 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on January 25, 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 092206  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***The Preliminary Amendment***

Receipt is acknowledged of the preliminary amendment filed on June 7, 2007. The amendment has been made of record in the file.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

### ***The Abstract***

The abstract of the disclosure is objected to because it is too long. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. Correction is required. See MPEP § 608.01(b).

### ***The Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***The Drawings***

The drawings are objected to under 37 CFR § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the computer specified in claim 50 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR § 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR § 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***The Information Disclosure Statement***

The prior art cited in the information disclosure statement filed on September 22, 2006 has been entered.

#### ***Additional Prior Art***

Amblard et al (US 2004/0004194 A1) disclose a method of and apparatus for acquiring images of intrinsic non-linear optical responses which may be resolved spatially in two or three dimensions.

#### ***Claim Objections***

Lines 14-18 of independent claim 1 and lines 17-21 of independent claim 50 are

inaccurate in that it is the data that is separated not the emerging light. In lines 14 and 16 of claim 1 and lines 17 and 19 of claim 50, --data representative of-- should be inserted after "of".

The claims include improper Markush groups. For example, see line 2 of claim 4, line 6 of claim 6, and lines 2 and 3 of claim 53.

The extensive use of "such as", "for example", "preferably", "particularly preferably", "e.g.", "etc.", "in particular", "so-called", "that is to say", "if appropriate" and parentheses in the dependent claims renders the claims indefinite because it is unclear whether the limitations following the phrases/words and within the parentheses are part of the claimed invention.

Claims 5-49 and 54-90 are objected to under 37 CFR § 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

#### ***Allowable Subject Matter***

Claims 1-4 and 50-53 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

As to independent claim 1, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method for the highly sensitive **simultaneous** measurement of nonlinear optical emission signals, spatially resolved in one or two spatial dimensions, comprising formatting the data in a one or multidimensional data matrix, characterized in that those portions of the data representative of the light emerging from the interaction spaces which are linearly proportional to the intensity of the excitation light available in the interaction spaces are separated from portions of the data representative of the light emerging from the interaction spaces which are nonlinearly proportional to the available excitation light intensity, in

combination with the rest of the limitations of the claim.

As to independent claim 50, the prior art of record, taken alone or in combination, fails to disclose or render obvious an analytical system for the highly sensitive **simultaneous** measurement of nonlinear optical emission signals, spatially resolved in one or two spatial dimensions, comprising a computer to which the measurement data of the detector arrays are transmitted and with the aid of which the measurement data are formatted in a one or multidimensional data matrix and analyzed, characterized in that those portions of the data representative of the light emerging from the interaction spaces which are linearly proportional to the intensity of the excitation light available in the interaction spaces are separated from portions of the data representative of the light emerging from the interaction spaces which are nonlinearly proportional to the available excitation light intensity, in combination with the rest of the limitations of the claim.

### ***Conclusion***

This application is in condition for allowance except for the formal matters set forth above.:

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

### ***Telephone Numbers***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner whose telephone number is (571) 272-2414.

Art Unit: 2877

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/F. L. Evans/  
Primary Examiner  
Art Unit 2877**

September 28, 2008